

BEST PRACTICE GUIDE FOR VESSEL OPERATORS

TMSA – 2

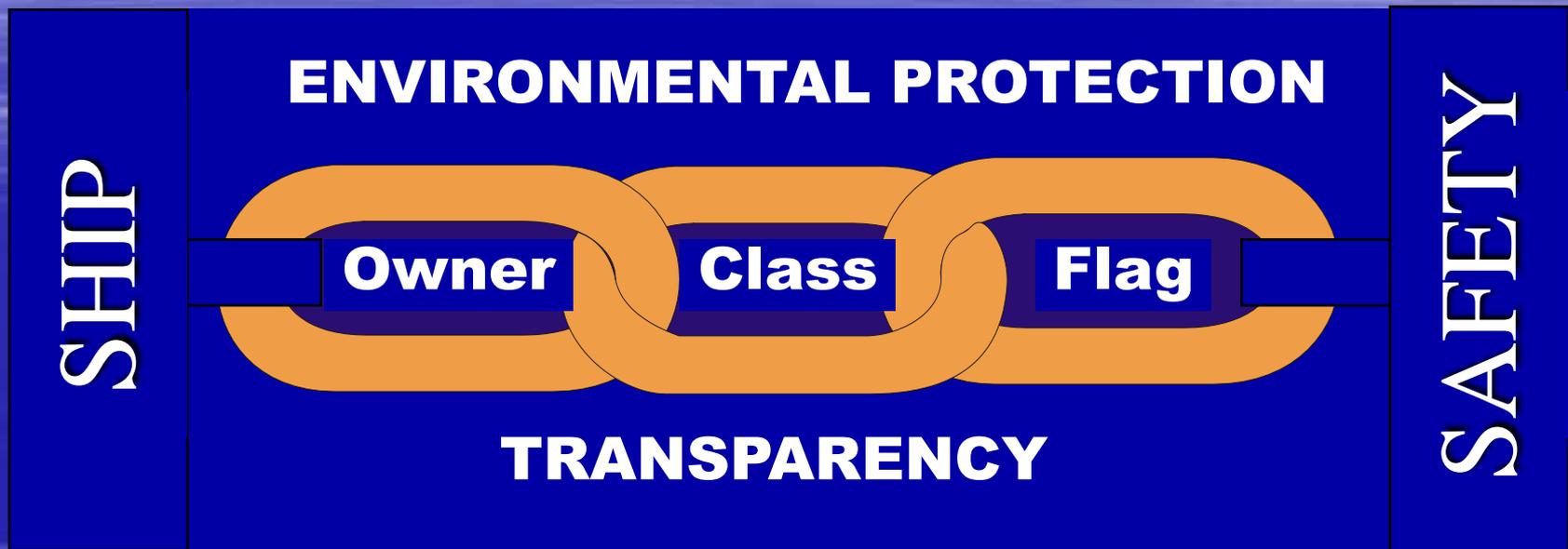
Capt. Roy M. Mathur

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California Department of Fish and Game*

The Maritime Industry



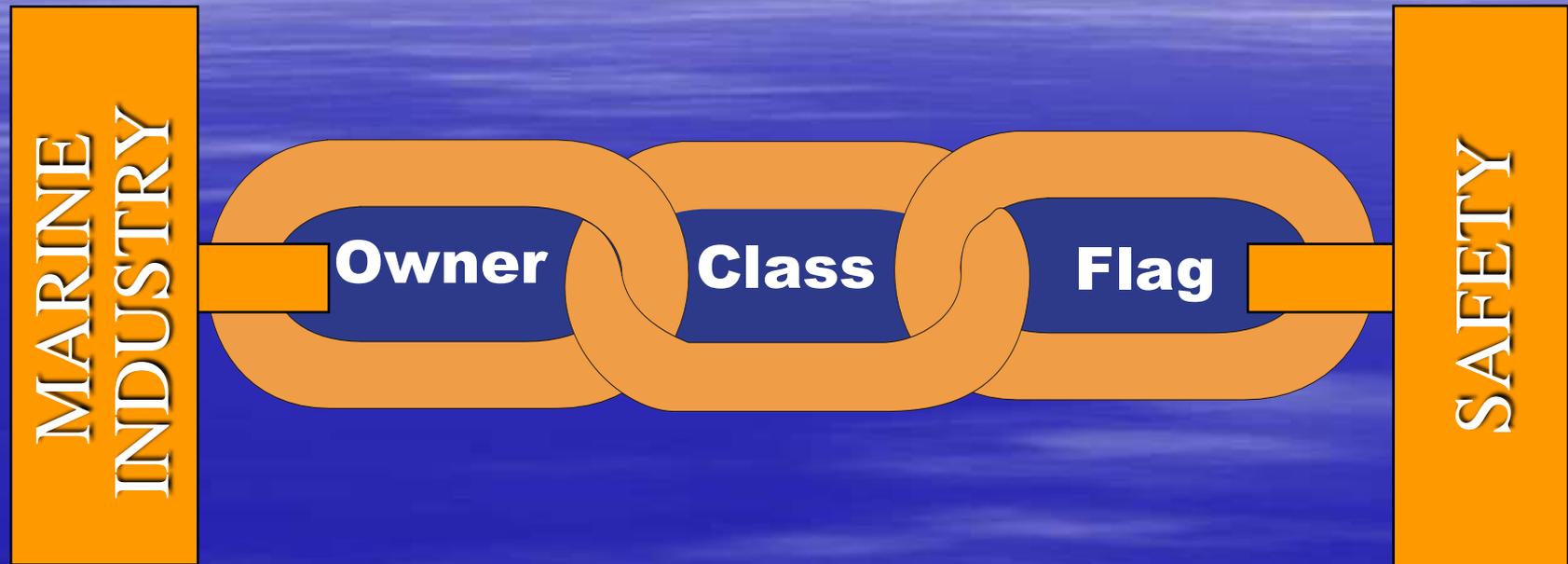
Marine Safety Chain of Responsibility



EACH PART OF THE MARINE INDUSTRY HAS ITS
PART TO PLAY IN RAISING STANDARDS

Marine Safety Chain of Responsibility

When is the chain at the required strength?



When there are no weak links

- Responsible Owner
- Effective Classification
- Strong Flag

VETTING

What are 'Oil Major' inspections ?

- The requirement of oil charterers for a vessel to be in full compliance with operational and statutory standards has led to vetting surveys.
- A successful 'inspection' is essential prior to acceptance
- THE OPERATOR'S OBLIGATION TO OBTAIN AN 'OIL MAJOR' APPROVAL AS PER GOVERNING CHARTER PARTY

VETTING - SIRE

Topics covered by Ship Inspection and Report Exchange

- Chapter 1. General information
- Chapter 2. Certification and documentation
- Chapter 3. Crew management
- Chapter 4. Navigation
- Chapter 5. Safety management
- Chapter 6. Pollution prevention
- Chapter 7. Structural condition
- Chapter 8. Cargo and ballast systems
- Chapter 9. Mooring
- Chapter 10. Communications
- Chapter 11. Engine and steering compartments
- Chapter 12. General appearance and condition

QUALITY STANDARD – ISM CODE

International Safety Management Code

- 1. Safety Management System
- 2. Safety and Environmental Protection Policy
- 3. Company Responsibilities and Authority
- 4. Designated Person(s)
- 5. Master's Responsibility and Authority
- 6. Resources and Personnel
- 7. Development of Plans for Shipboard Operations
- 8. Emergency Preparedness
- 9. Reports and Analysis of Nonconformities and Accidents
- 10. Maintenance of the Ship and Equipment
- 11. Documentation
- 12. Company Verification, Review, and Control
- 13. Certification, Verification, and Control

Tanker Management & Self Assessment

Q - WHO HAS OVERSIGHT OF THE VESSEL OPERATOR

A - THE FIRST COMPREHENSIVE OVERSIGHT OF THE OPERATOR IS TMSA

- TMSA WAS INTRODUCED BY OCIMF IN 2004 AS A TOOL TO HELP VESSEL OPERATORS ASSESS, MEASURE AND IMPROVE THEIR MANAGEMENT SYSTEMS.

OCIMF and TMSA

OIL COMPANIES INTERNATIONAL MARINE FORUM

OCIMF IS A VOLUNTARY ASSOCIATION OF OIL COMPANIES HAVING AN INTEREST IN THE SHIPMENT AND TERMINALLING OF OIL

THE PRIMARY OBJECTIVES OF THE OCIMF ARE THE PROMOTION OF SAFETY AND PREVENTION OF POLLUTION FROM TANKERS AT OIL TERMINALS

OCIMF HAS CONSULTATIVE STATUS AT THE INTERNATIONAL MARITIME ORGANIZATION (IMO)

WWW.OCIMF-TMSA.COM

FROM ISM CODE TO TANKER MANAGEMENT AND SELF ASSESSMENT

What is TMSA?

TMSA BUILDS ON THE FOUNDATION OF ISM CODE AND CONSIDERS THE ISM CODE AS STAGE 1

- *TMSA Stage 1 - is basically ISM mandatory compliance*
- *TMSA Stage 2 - continuous improvement against specific KPI's*
- *TMSA Stage 3 - continuous improvement against specific KPI's*
- *TMSA Stage 4 - continuous improvement against specific KPI's
“the best you can be”*

TMSA – Best Practices Guide

TMSA IS...

- Best Practice Guide for Ship Operators
A 'VOLUNTARY' NEW INDUSTRY STANDARD
- Tanker Manager's SELF ASSESSMENT
- A vetting tool for the OIL MAJOR to evaluate the SHIP OPERATOR

FOCUS OF PRESENTATION

- TMSA Guidelines and the 12 Elements
- Salient Features of TMSA
- Benefits and Advantages of TMSA

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Self assessment is a

“LEADING INDICATOR”,

as compared to *‘Vetting’* and *‘Port State Control’* which are

“TRAILING INDICATORS”

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■ **A – Act**

- Management Review

■ **C – Check**

- Monitoring and Measurement
- Evaluation and Compliance
- Nonconformity, corrective action and preventive action
- Control of Records
- Internal Audit

■ **P – Plan**

- Establish Resources
- Carry out 'Gap Analysis'

■ **D – Do**

- Establish Procedures
- Training and Awareness
- Communication
- Documentation

Tanker Management and Self Assessment

How Does it Work

- **PLAN** **CLARITY IN COMPANY POLICIES**, PURPOSE, PROCESSES, ROLES AND RESPONSIBILITIES. FOCUS ON SAFETY, ENVIRONMENT EXCELLENCE AND COMMERCIAL EXCELLENCE.
- **ACT** **WORK TO ACHIEVE COMPANY'S OBJECTIVES** & ENSURE CONSISTANT IMPLEMENTATION OF PLANS, COMMUNICATE GUIDELINES, PRIORITIZE & TARGET IMPROVEMENT.
- **MEASURE** **CHECK, EVALUATE & MEASURE FEEDBACK** ON RESULTS ACHIEVED. LOOK FOR SUSTAINABLE IMPROVEMENT.
- **IMPROVE** **DEFINE TARGETS** (PRACTICAL) & FOCUS ON AREAS WHERE MAXIMUM BENEFIT & IMPROVEMENT CAN BE OBTAINED. CONCENTRATE ON LONG TERM IMPROVEMENTS RATHER THAN QUICK FIXES.

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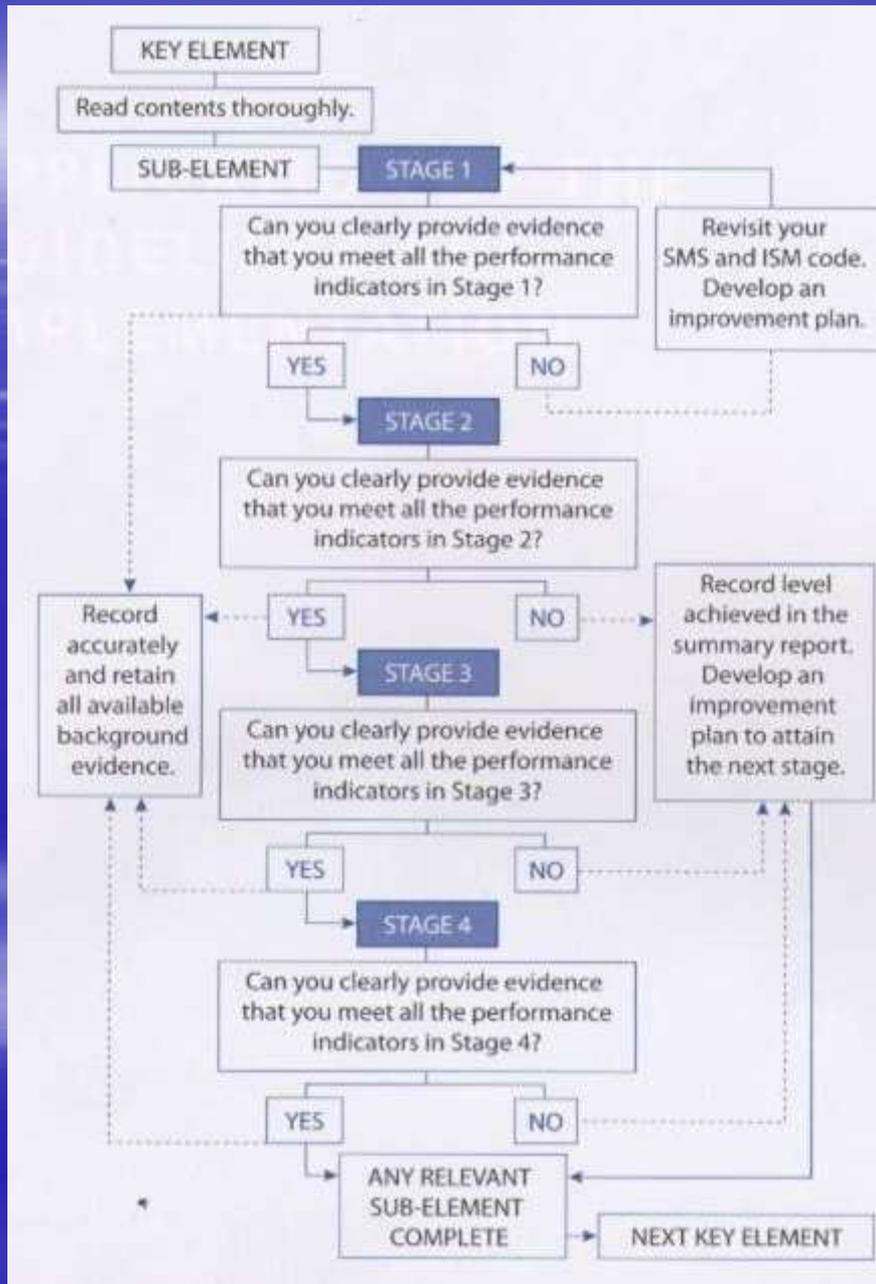
THE 12 ELEMENTS

1. MANAGEMENT, LEADERSHIP & ACCOUNTABILITY
2. RECRUITMENT & MANAGEMENT OF SHORE PERSONNEL
3. RECRUITMENT & MANAGEMENT OF SHIPS PERSONNEL
4. RELIABILITY AND MAINTENANCE STANDARDS
5. NAVIGATIONAL SAFETY
6. CARGO, BALLAST AND MOORING OPERATIONS
7. MANAGEMENT OF CHANGE
8. INCIDENT INVESTIGATION & ANALYSIS
9. SAFETY MANAGEMENT – MONITORING ASHORE & ON VESSEL
10. ENVIRONMENTAL MANAGEMENT
11. EMERGENCY PREPAREDNESS & CONTINGENCY PLANNING
12. MEASUREMENT, ANALYSIS & IMPROVEMENT

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12 KEY ELEMENTS – EACH ONE WITH A MAIN OBJECTIVE

- SPECIFIC KEY PERFORMANCE INDICATORS (KPI) & BEST PRACTICE GUIDE
- THE CONCEPT OF 'RISK ASSESSMENT' BECOMES AN INTEGRAL PART OF THE MANAGEMENT SYSTEM
- PERFORMANCE EVALUATION BASED ON 4 STAGES



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SALIENT FEATURES:

- EMPHASIS ON THE RECRUITMENT AND MANAGEMENT OF SHORE AND SHIP PERSONNEL – INCLUDING RETENTION BENCHMARKS (Element 2 & 3)
- EMPHASIS ON ENVIRONMENTAL MANAGEMENT COMPANY POLICY - INCLUDES A 'ZERO SPILL' STATEMENT (Element 10)
- A CONTROLLED MANAGEMENT OF CHANGE PROCESS (Element 7)

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SALIENT FEATURES:

- FORMAL NAVIGATIONAL AUDITS BY SHIP MASTER. SHORE STAFF CHECK RECORDS DURING VISITS (ELEMENT 5)
- AT LEAST TWO PERSONS ON EACH VESSEL TRAINED IN “RISK ASSESSMENT AND INCIDENT INVESTIGATION” (ELEMENT 8)
- APPROPRIATE PERSONNEL ASHORE TRAINED IN “INCIDENT INVESTIGATION” (ELEMENT 8)

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SALIENT FEATURES:

- ROTATION OF SHIP STAFF THROUGH OFFICE ASSIGNMENTS (ESPECIALLY PRIOR PROMOTIONS) (Element 3)
- PARTICIPATION OF ALL SHIPS STAFF IN SAFETY SEMINARS AT LEAST ONCE IN TWO YEARS (Element 2)
- A SYSTEMATIC INTERVIEW PROCESS WITH SET QUESTIONNAIRE (Element 3)

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SALIENT FEATURES:

- AUDIT MANNING AGENCIES AT LEAST ONCE A YEAR (ELEMENT 3)
- EMPHASIS ON SUPERINTENDENTS VISIT TO SHIP (VERIFY CARGO PLANS, STABILITY & STRESSES, COMPLIANCE WITH SEASONAL LOADLINE ZONES ETC. (ELEMENT 6))
- HANDING OVER / TAKING OVER PROCESS FOR SHIP & SHORE STAFF (ELEMENT 7)

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SALIENT FEATURES:

- FORMAL RISK ASSESSEMENT PROGRAMS FOR NON-ROUTINE REPAIRS AND RECORDS (ELEMENT 9)
- A LONG TERM (5 YEAR MINIMUM) ENVIRONMENTAL OPERATIONS AND BUSINESS PLAN (ELEMENT 10)

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SALIENT FEATURES:

- EXTERNAL RESOURCES MOBILIZED AT LEAST ANNUALLY FOR 'CASUALTY RESPONSE TRAINING' (ELEMENT 11)
- PARTICIPATION OF SHIPS STAFF (ON LEAVE) IN DRILLS & EXERCISES HELD ASHORE (ELEMENT 11)

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SALIENT FEATURES:

- TO MAINTAIN STATISTICS FOR PMS.
TO SHOW PERCENTAGE OF OUTSTANDING PMS ITEMS PER VESSEL ON A MONTHLY BASIS WITH A YEAR TO DATE UPDATE. (ELEMENT 4C, STAGE 4 – TARGET = LESS THAN 1%)

OPERATORS TO HAVE BENCH MARKS TO SHOW CONTINUOUS IMPROVEMENT, KPI'S ARE SET TOWARDS VERIFICATION OF IMPROVEMENT

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CHALLENGES

- 1) MANAGEMENT COMMITMENT
- 2) SIGNIFICANT RESOURCES OUTLAY
- 3) RISK MANAGEMENT
- 4) MANAGEMENT OF CHANGE
- 5) BENCH MARKING

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Concerns

RECENT INTERNATIONAL STUDIES SHOW WRT ISM CODE IMPLEMENTATION, THE MAXIMUM NON-CONFORMITIES HAVE BEEN REPORTED IN CLAUSE NO's:

- ISM Clause 6 (RESOURCES & PERSONNEL)
- ISM Clause 10 (MAINTENANCE OF THE VESSEL AND EQUIPMENT)
- ISM Clause 11 (DOCUMENTATION)

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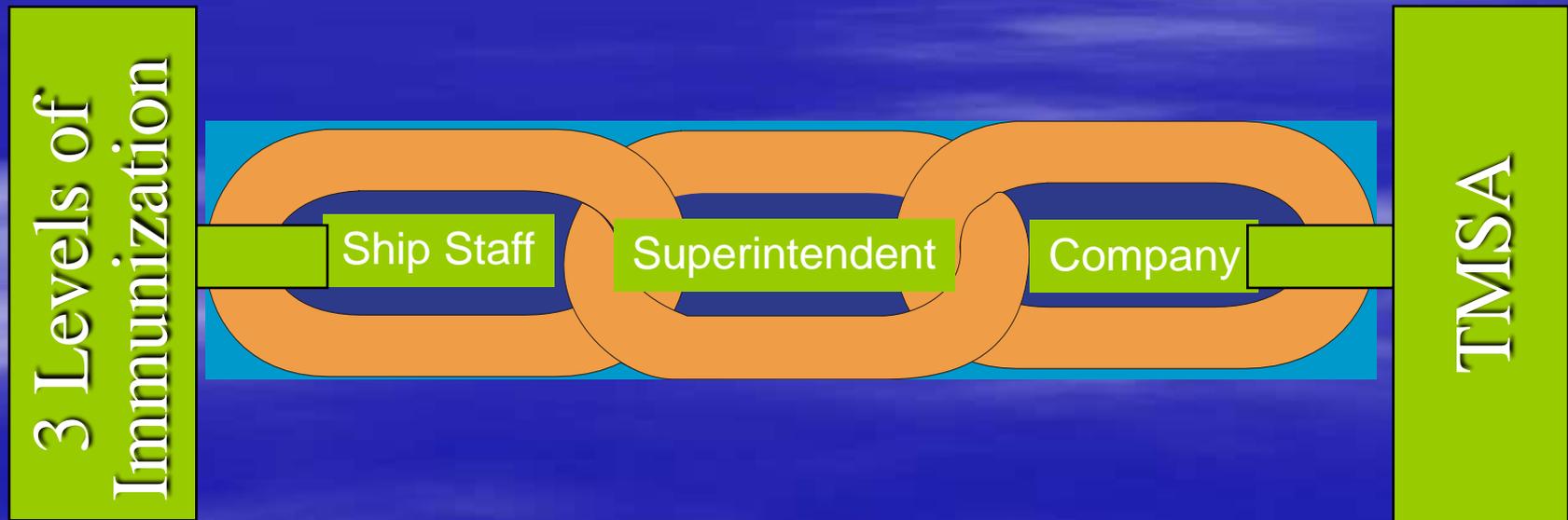
ROOT CAUSE ANALYSIS ON 'NON-CONFORMITIES' OF THE ISM CODE REVEAL:

There may be lack of understanding in the perception of 'risk management' between ship and shore personnel.

Increased cross training between ship and shore personnel is required to eliminate the root cause of non-conformities – 'human error'.

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- SELF CHECK – BY SHIPS STAFF
- CROSS CHECK – BY SUPERINTENDENT
- EXTERNAL CHECK – BY COMPANY LOSS PREVENTION DEPARTMENT



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BENEFITS OF TMSA

- a) TMSA PROVIDES A STANDARDIZED FORMAT FOR 3RD PARTY TO EVALUATE THE OPERATORS PERFORMANCE AGAINST AN ESTABLISHED STANDARD
- b) TMSA ESTABLISHES A BASELINE REFERENCE POINT AND PROVIDES A FORMAT FOR BEST PRACTICES SHARING
- c) GOALS BY WAY OF BEST PRACTICES AND CONTINUOUS IMPROVEMENT

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...BENEFITS OF TMSA

- d) DIRECTLY ADDRESSING LEADERSHIP AND ACCOUNTABILITY ASHORE
- e) COMPELLING THE OPERATORS TO ESTABLISH BENCHMARKS AND MEASURE RESULTS
- f) DIRECTING THE ORGANIZATION BASED ON FACTUAL INFORMATION, THE RESULT OF MEASUREMENT AND ANALYSIS

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ADVANTAGES OF TMSA

- NO CERTIFICATION
- SELF ASSESSMENT
- CONTINUOUS IMPROVEMENT
- EXPERIENCE SHARING

SAME PRINCIPLES CAN BE APPLIED TO ALL TYPES OF VESSELS

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CONTINUOUS IMPROVEMENT

- TMSA ESTABLISHES A CONTINUOUS IMPROVEMENT CYCLE, BOTH, IN CONTENT AND PRACTICES IN ESTABLISHING HIGHER STANDARDS
- FEEDBACK AND IMPROVED PRACTICES FROM OPERATORS IS BEING INCORPORATED INTO THE SYSTEM

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From TMSA Stage 1 to TMSA Stage 4 ...

- STAGE 1 IS THE FOUNDATION

...using 'GAP ANALYSIS',

- FOLLOW THE CONTINUOUS IMPROVEMENT CYCLE TO ACHIEVE STAGE 2 & 3
- FINAL GOAL IS TO MEET STAGE 4 – THE HIGHEST VOLUNTARY INDUSTRY STANDARD

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WHY TMSA ...

- TMSA STAGE 1 IS ISM MANDATORY COMPLIANCE
TMSA STAGE 4 IS THE 'BEST YOU CAN BE'
- CHARTERERS MAY BE WILLING TO PAY A PREMIUM FOR STAGE 4 VESSELS, SINCE THE SAFETY AND OPERATIONAL STANDARDS ARE HIGHER
- OPERATORS OF STAGE 4 SHIPS WILL FIND THEIR SHIPS MORE MARKETABLE AND COMMERCIALY VIABLE

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Thank you

Capt. Roy M. Mathur

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